

**REMARKS**

Claims 9-25 are active in this application.

Applicants wish to thank Examiner Mazumdar and Supervisory Examiner Fiorilla for the helpful discussion on April 3, 2007. Applicants respectfully request reconsideration of the application in view of the following remarks which were also discussed during the interview.

The present invention as set forth in **Claim 9** relates to a method for producing functional film, comprising:

applying a coating liquid having functional microparticulates dispersed therein onto a support, thereby forming a microparticulate-containing coating,

drying the microparticulate-containing coating,

**compressing the microparticulate-containing coating at a temperature of 15 to 40°C, thereby forming a functional film comprising a compressed microparticulate-containing layer, and**

**transferring the functional film onto another support;**

**wherein the compressed microparticulate-containing layer does not have cracks and is capable of being drawn 10% without forming cracks; and**

wherein the compressed microparticulate-containing layer does not comprise a resin as a binder.

The present invention as set forth in **Claim 18** relates to a method for producing a functional film, comprising:

applying a coating liquid having functional microparticulates dispersed therein onto a support, thereby forming a microparticulate-containing coating,

drying the microparticulate-containing coating,

**compressing the microparticulate-containing coating at a temperature of 15 to 40°C thereby forming a functional film comprising a compressed microparticulate-containing layer, and**

**transferring the functional film onto another support;**

**wherein the compressed microparticulate-containing layer is capable of being drawn 10% and in a 10% drawn state exhibits a surface resistivity which is at most 10 times greater than the surface resistivity prior to drawing; and**

wherein the compressed microparticulate-containing layer does not comprise a resin as a binder.

Oka et al fail to disclose or suggest a methods for producing functional film as claimed in Claims 9 and 18 in which the **microparticulate-containing coating is compressed at a temperature of 15 to 40°C thereby forming a functional film comprising a compressed microparticulate-containing layer, and**

**transferring the functional film onto another support;**

**wherein the compressed microparticulate-containing layer is capable of being drawn 10% and in a 10% drawn state exhibits a surface resistivity which is at most 10 times greater than the surface resistivity prior to drawing.**

The Abstract of Oka discloses a method including steps of forming a functional ultrafine particle layer 2 on a release film 1, separately coating a resin composition for a hard coat layer on a plastic substrate film 3, laminating the coated release film 1 to the coated plastic substrate film 3 by press-bonding so that the functional ultrafine particle layer 2 faces the resin composition coating (hard coat layer 4), thereby causing part of the functional ultrafine particles 5 to be embedded in the resin composition coating for a hard coat layer 4, curing the resultant laminate, and peeling off the release film 1 and states that in the resultant transparent functional film, the functional ultrafine pp tide layer 2 is partly embedded in and

fixed to the hard coat layer 4, and the functional ultrafine particles 5 are localized in the hard coat layer 4 on its surface side.

Further, Oka refers at column 10, lines 49 to 65 to a process shown in Figs. 5a to 5d which comprises steps of forming a functional ultrafine particle layer 2 on the release film 1, coating thereon a resin composition for a hard coat layer, thereby forming a hard coat layer 4 (Fig. 5a), laminating and press-bonding the uncured hard coat layer 4 formed on the release film 1 to the transparent plastic substrate film 3 (Fig. 5b), effecting a curing treatment on the laminate to full cure or half cure the hard coat layer 4, and peeling off the release film 1 (Fig. 3d).

On the other hand, Oka relates to an antireflection film and illustrates  $\text{TiO}_2$  and ITO as an example of functional ultrafine particles at column 12, lines 7 to 8 and lines 24 to 25 and in Oka, the term “ultrafine particles” is defined to mean particles having an average particle diameter of not more than 200 nm (column 12, lines 27 to 30).

Thus, Oka discloses a method for fabricating an antireflection film and coating a coating solution containing  $\text{TiO}_2$  or ITO having an average particle diameter of not more than 200 nm, laminating the coated release film onto a substrate film and peeling off the release film from the laminate.

**However, even if the functional ultrafine particle layer 2 of Oka corresponds to the microparticulate-containing coating layer of the present invention, the functional ultrafine particle layer 2 of Oka is pressed together with the hard coat layer 4 formed on the substrate film 3 or formed thereon so that the functional ultrafine particle layer 2 is partly embedded in the hard coat layer 4 and therefore, Oka does not disclose compressing the functional ultrafine particle layer 2 itself after being dried and prior to transferring to the substrate film.**

Further, Oka discloses at column 53, lines 31 to 50 a process comprising of steps of repeating the procedure of Example C 1 to form on a release film a layer of ultrafine particles having a low refractive index and a layer of ultrafine particles having a high refractive index, coating thereon an  $\text{Sb}_2\text{O}_5$  sol having a refractive index of 1.68 to a thickness of 90 nm to form another layer of ultrafine particles having a low refractive index, coating an ionizing radiation curing resin thereon to a thickness of 5  $\mu\text{m}$  on a dry basis, irradiating the coated release film with an electron beam at 4 Mrad to cure the resin, laminating the coated released film prepared in the above step to a TAC film through a urethane adhesive layer in such a manner that the coating on the released film faces the TAC film, aging the laminate at 40 °C for three days to full cure, and peeling off the released film from the laminate.

Therefore, similarly to the descriptions of Oka mentioned above, in this description, the release film is compressed when it is laminated to the TAC film via the urethane adhesive layer and is **not compressed prior to transferring it onto another support**.

Further, Oka merely discloses aging the laminate at 40 °C and does not disclose or suggest compressing the release film itself at 40 °C.

Furthermore, Oka discloses at column 54, line 61 to column 55, line 22 a process comprising of steps of coating a sol of ultrafine  $\text{MgF}_2$  particles on the same release film as used in Example C 1 to a thickness of 100 nm, coating thereon a coating solution comprising a 20:1 mixture of a sol of ultrafine  $\text{TiO}_2$  particles and an ionizing radiation curing resin to a thickness of 130 nm, irradiating the coated release film with an electron beam at 2 Mrad to cure the resin layer containing ultrafine  $\text{TiO}_2$  particles, coating a coating solution comprising a 20:1 mixture of a sol of ultrafine  $\text{ZnO}$  particles and an ionizing radiation curing resin on the cured resin layer to a thickness of 70 nm, irradiating the coating with an electron beam at 2 Mrad to cure the resin layer containing ultrafine  $\text{ZnO}$  particles, coating thereon an ionizing radiation curing resin to a thickness of 5  $\mu\text{m}$  on a dry basis, irradiating the coated release film

with an electron beam at 5 Mrad to cure the resin layer consisting of an ionizing radiation curing resin, coating thereon a urethane adhesive to a thickness of 3  $\mu\text{m}$  on a dry basis, laminating the resultant coating to a saponified TAC film, aging the laminate at 40 °C for two days, and peeling off the release film, thereby transferring the laminate to the saponified TAC film.

Thus, in this description, similarly to the descriptions of Oka mentioned above, **the release film is compressed when it is laminated to the saponified TAC film via the urethane adhesive layer and is not compressed prior to transferring it onto another support.**

Further, **this description also merely discloses aging the laminate at 40 °C and does not disclose compressing the release film itself at 40 °C.**

In view of the above, it is apparent that Oka does not disclose or suggest the features of the present Claims 9 and 18, namely, “compressing the microparticulate containing coating at a temperature of 15 to 40 °C, thereby forming a functional film comprising a compressed microparticulate-containing layer”, “transferring the functional film formed by compressing the microparticulate-containing coating onto another support” at all.

On the other hand, it is clear from the specification of the captioned application that it is possible to form the compressed microparticulate containing coating free from cracks, capable of being drawn 10% without forming cracks and exhibiting a surface resistivity in a 10% drawn state which is at most 10 times greater than the surface resistivity prior to drawing in the present invention because the microparticulate-containing coating is compressed prior to transferring it onto another support so that the packing density of microparticulates can be increased.

Therefore, in the method of Oka it is impossible to form the compressed microparticulate-containing coating free from cracks, capable of being drawn 10% without

forming cracks and exhibiting a surface resistivity in a 10% drawn state which is at most 10 times greater than the surface resistivity prior to drawing.

Oka et al merely disclose that the release film coated with the functional ultrafine particle layer is pressed when it is bonded to another support and neither discloses nor suggests that the release film coated with the functional ultrafine particle layer **itself** is compressed. Therefore, unlike in the present invention, it is impossible in Oka et al to increase the packing density of microparticulates per unit volume to form a microparticulate-containing layer having no cracks and being capable of being drawn 10% without forming cracks and exhibiting, in a 10% drawn state, a surface resistivity which is at most 10 times greater than the surface resistivity prior to drawing.

Therefore, the rejection of the claims over Oka et al is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

Furthermore, all inventors designated in this application were employees of TDK Corporation and under obligation to assign the results of their research to TDK Corporation at the time the invention was made.

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This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon

Customer Number  
**22850**

  
Kirsten A. Grueneberg, Ph.D.  
Registration No.: 47,297